

# Verifying Connections for KMTNS-N



# Getting ready

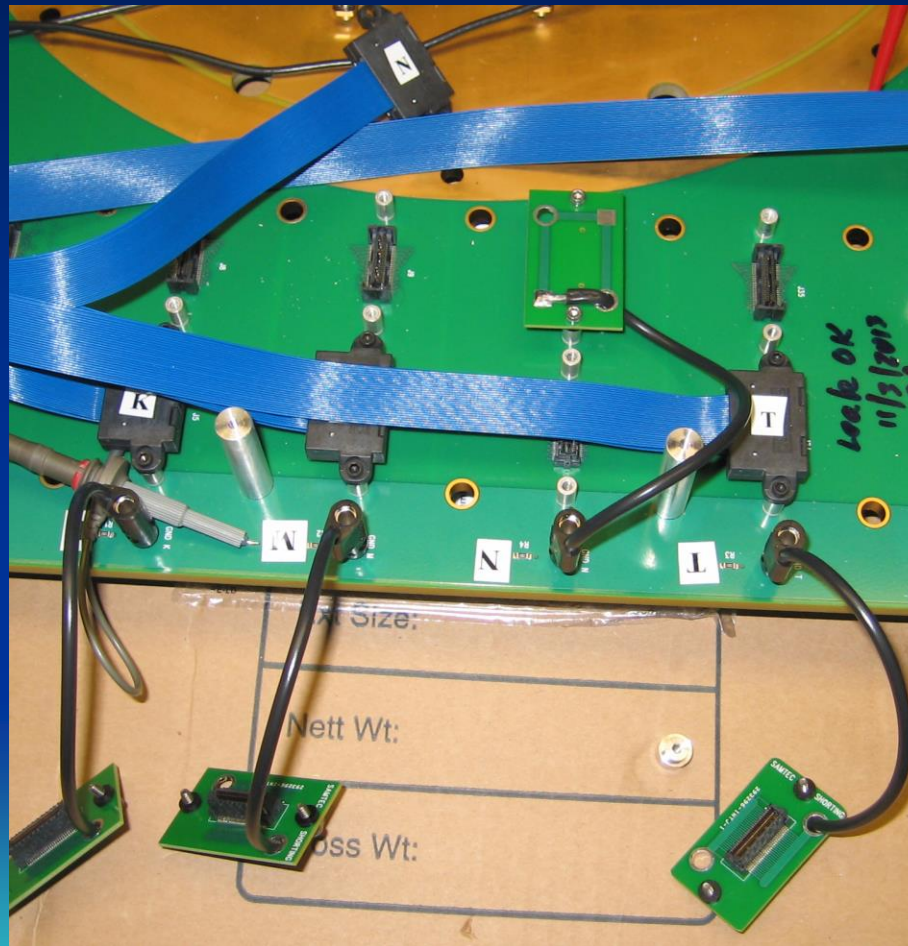
- Insure that power has been off for > three minutes
- Disconnect power cord at HE to insure that power will not be inadvertently restored
- Ground scissor lift with extension cord to male connector for on-platform power outlet
- Verify wrist strap for everyone present



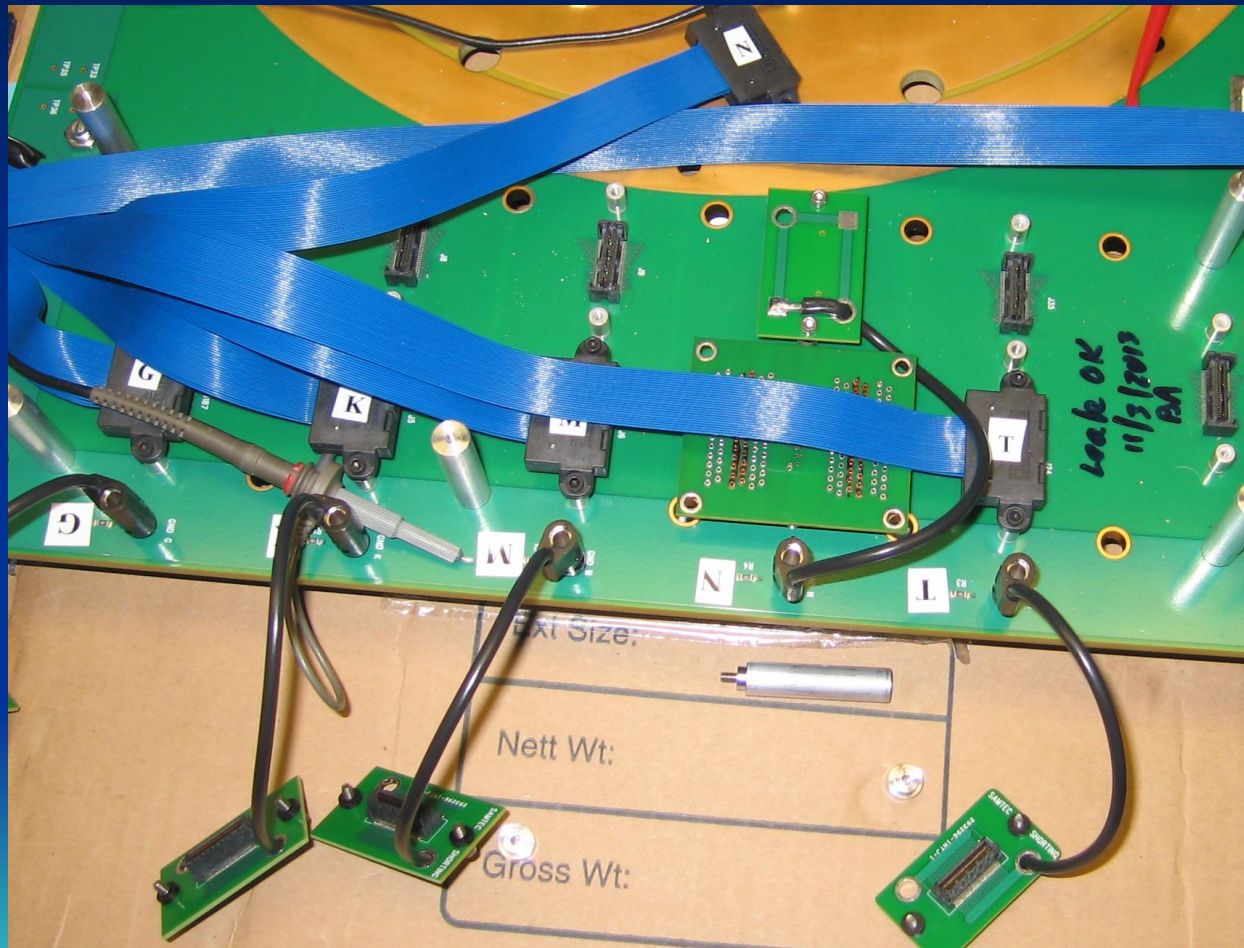
KMTNS-N  
Verify J29 continuity  
first



# Verify that N shoring plug is connected to J78

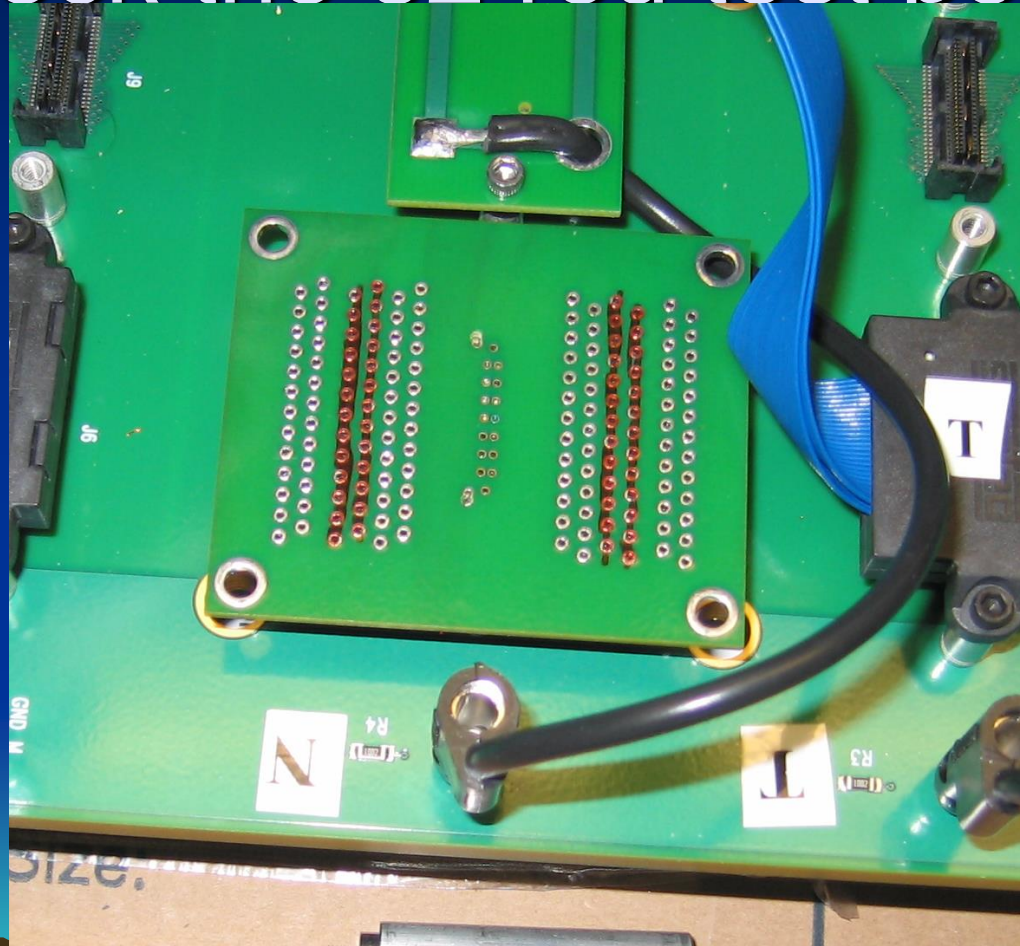


# Install female breakout board on J29





Verify that all pins have a  
resistance of  $< 4$  Ohms to ground.  
Check the 52 red test points

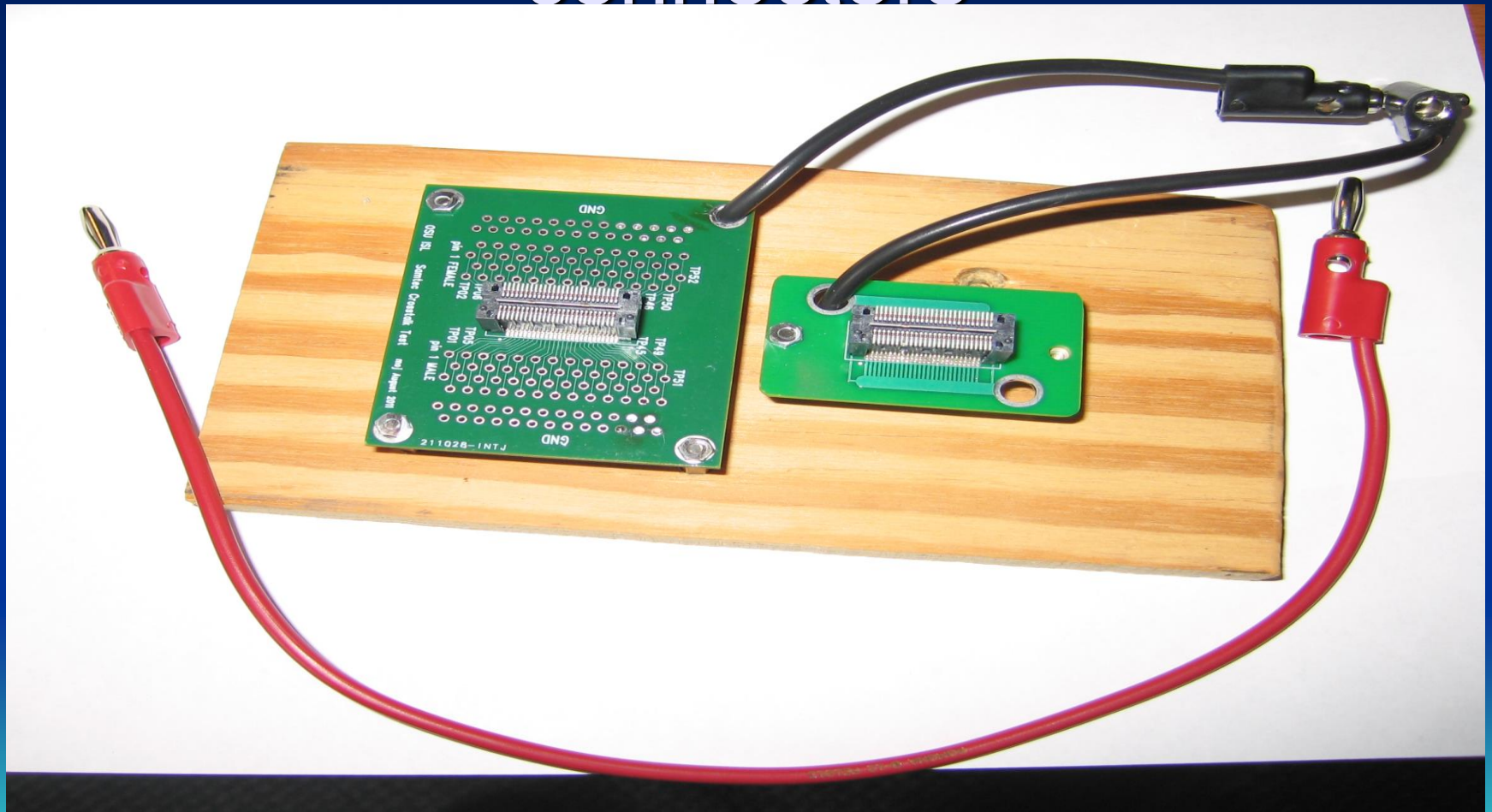


# KMTNS-N

## Verify Output Source Connections

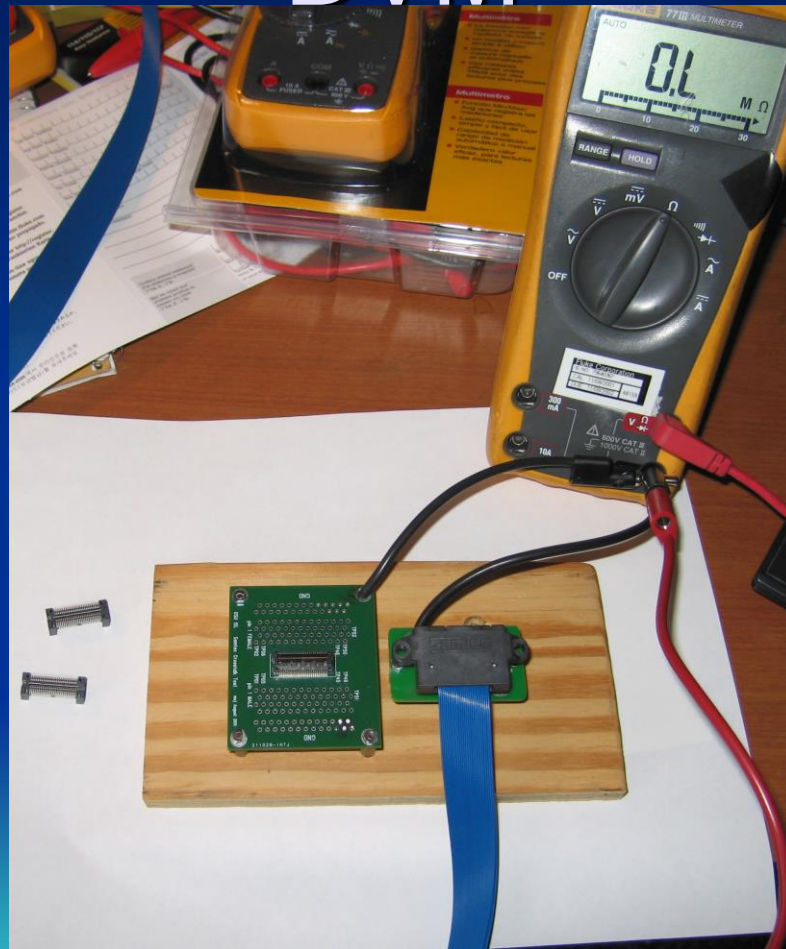


Test board as shipped, note female connectors in place to protect male connectors





# Basic setup, blue test cable on shorting plug grounds connected to DVM



# Reconnect HE to N

- Verify that the N shorting plug is in place, connected to J78.
- Connect the male end of the N blue cable from the HE to J29 on the Wall board



- Connect both black leads to the meter
- Connect the red banana jumper between the meter and the N shorting plug

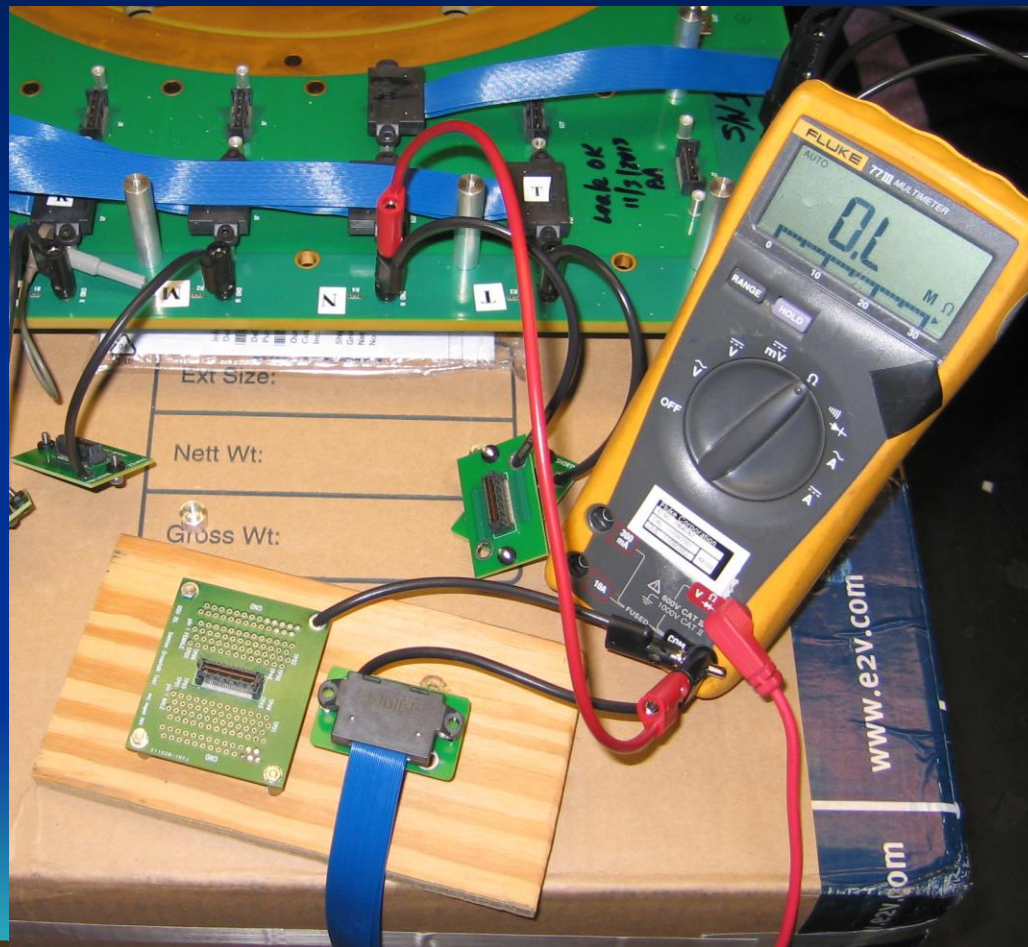


# Make connections to wall board IN THIS ORDER

- Insure that both black pig-tails are connected to meter
- Use Red banana jumper to connect meter ground to N shorting plug.
- After verifying that everything is grounded remove the shorting plug from J78 and immediately connect the blue test cable to J78. Not that this is equivalent to removing one shorting plug and installing another. This is safe because, during the time there was no shorting plug connected, the detector was connected to the electronics on the CBB.



# Connected to wall board, the order is important

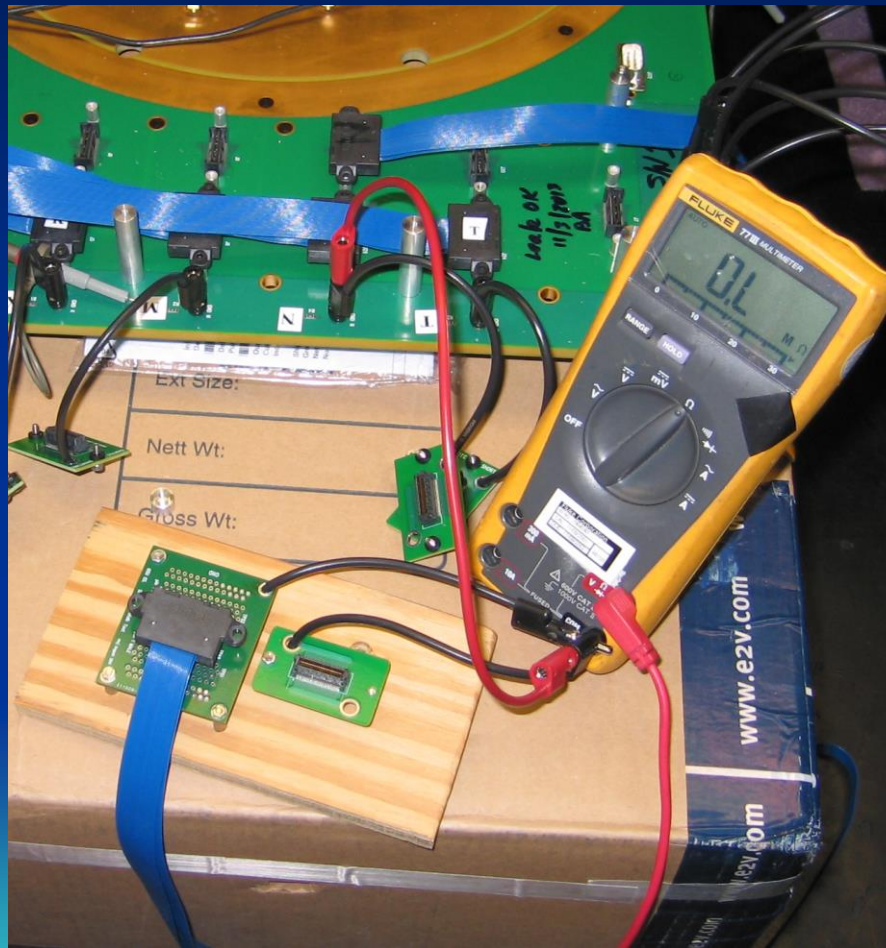




- After confirming that everything is connected as shown above, move the female end of the blue test cable from the shorting plug to the test connector. As shown in the next image



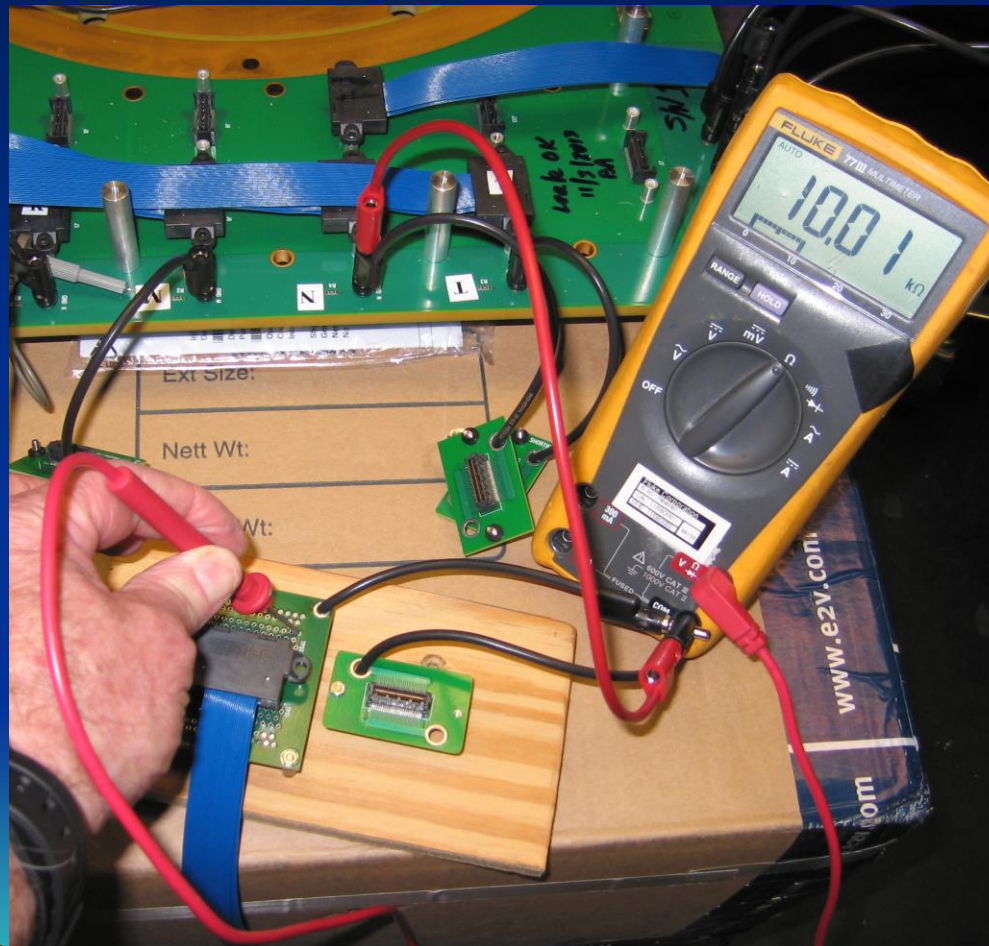
# Connected to wall board



- Verify that 8 output sources measure about 1300 Ohms (1.3k) to ground. Note that in the picture the meter reads 10kOhms, the resistance of the load resistor on the post-amplifier, because no detector is connected.
- If any resistance is found less than 1200 Ohms (1.2k) Stop. Do not power up N.

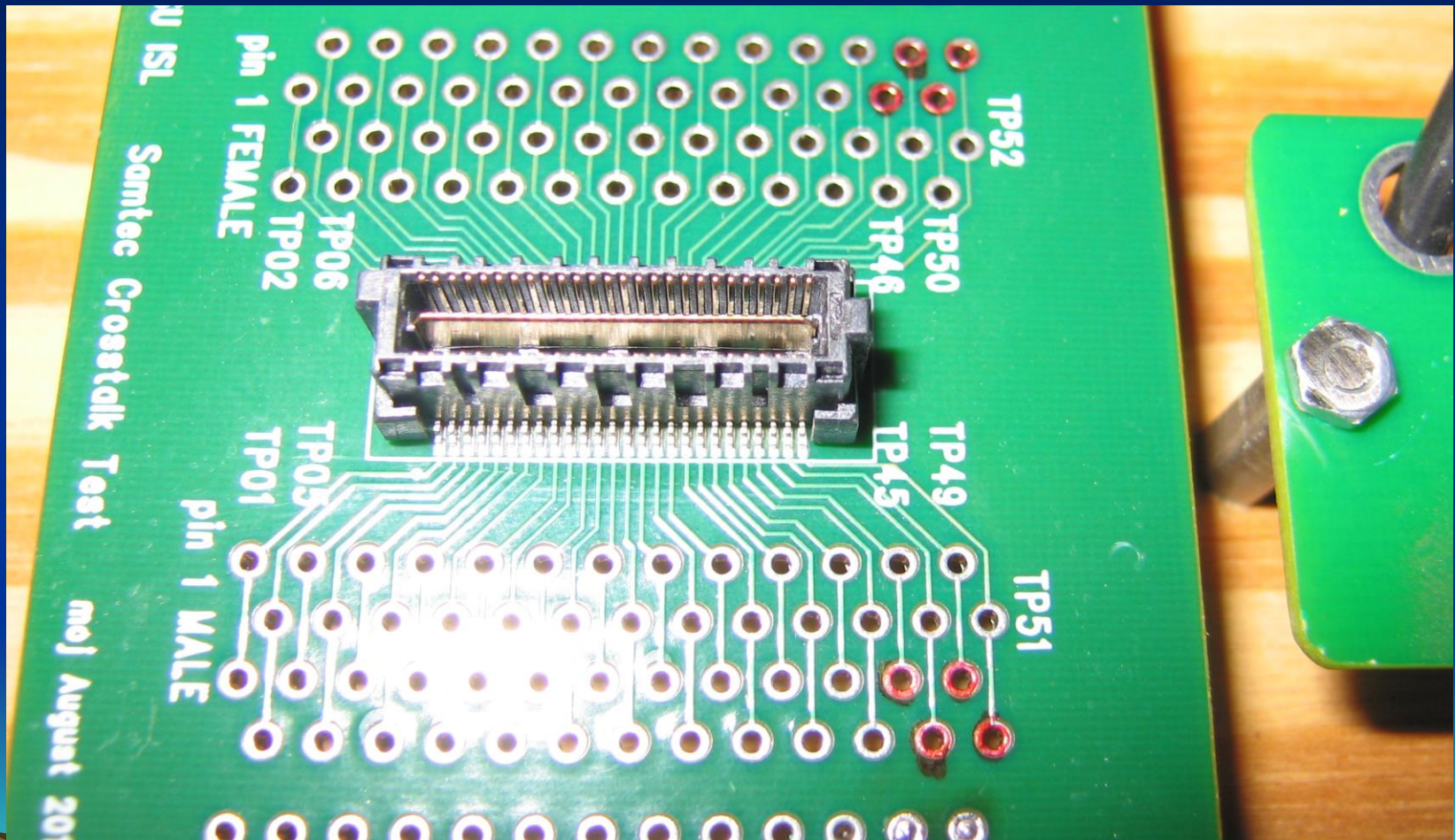


# Checking the Output Source Resistance to Ground





# Test points for the output sources marked in red

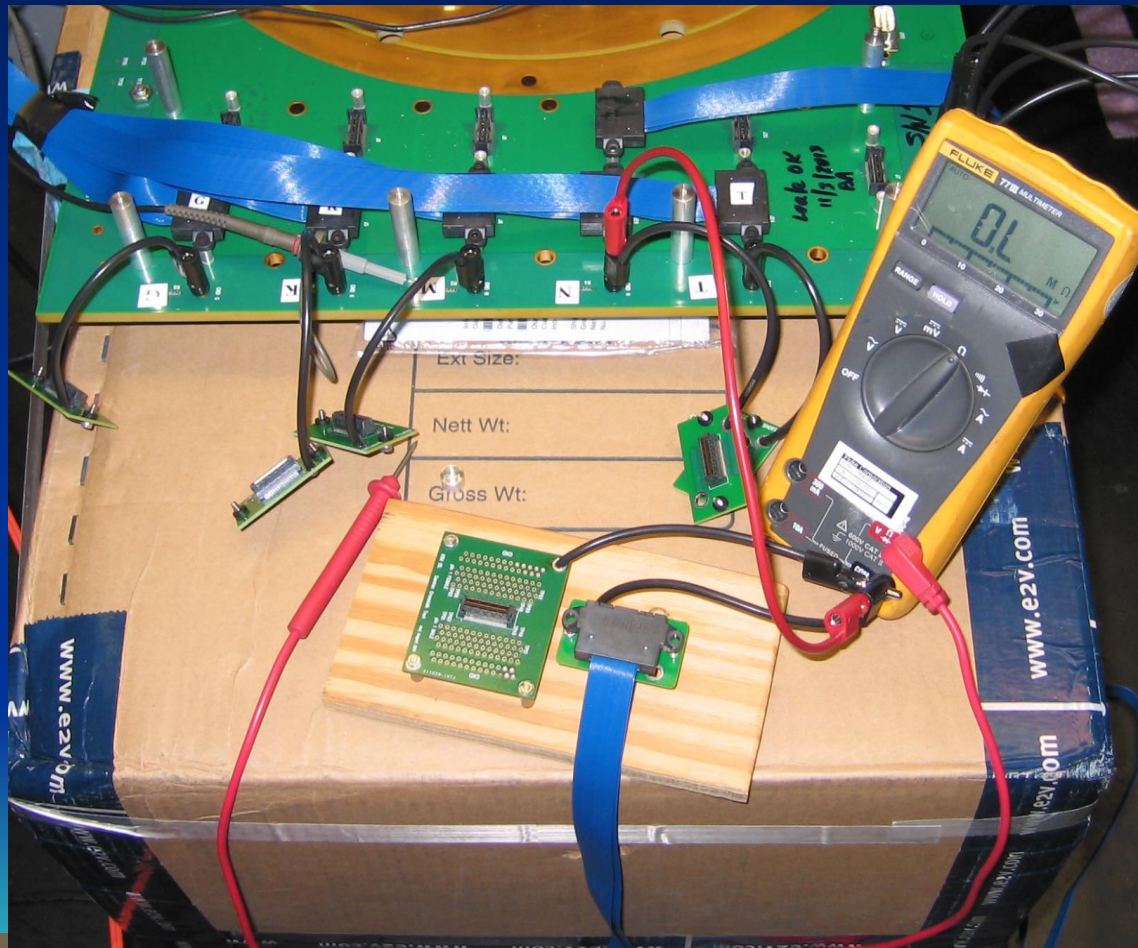




- When the resistance of all output sources is confirmed move the female end of the test cable from the test plug to the shorting plug then remove the male end of the test cable from J78 on the wall board.
- Finally unplug the red banana jumper from the N shorting plug



# Measurments finished



# Disconnect Blue Test Cable from J78

